A COMPANION

1661:19

TO

THE NEW AMERICAN READING CHARTS,

WITH OBJECT LESSONS.

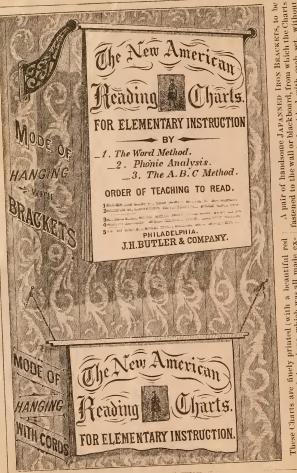
FOR THE USE OF TEACHERS.



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fastened to the wall or blackboard, from which the Charts If preferred, cords may be used instead of can be suspended, is furnished with each set, without extra charge.

border), in bold and clear type, which was all made ex-

In Nos. 15 and 16, and in the phonic spelling exercises of the other Charts, silent letters are indicated by a novel

and original device.

tractive, and the illustrations are appropriate.

pressly for the purpose.

The matter is pleasing and at-

26 × 33 inches in size. On walnut brackets. (See Illustrations. 30 numbers in a set.

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A COMPANION TO THE LB C1

ORDER OF TEACHING TO READ.

- 1. Train the sight to recognize the form of the printed word, the visible symbol of the idea.
- 2. Train the hearing to recognize the elementary sounds of the spoken word, the audible symbol of the idea.
- 3. Train the vocal organs to pronounce words distinctly, easily, and naturally.
- 4. Train the pupil to understand what he reads, and to read it gracefully and with expression, avoiding a formal, monotonous mode of delivery.
- 5. Train the pupil to remember what he has read, and to give some account of it in his own words.

Chart Number One.

Object Questions.—What do you see in the picture? A dog, a pup, a man, a boy.—What has the man in his hand? A cane.—Does he hold it in his right hand, or in his left? In his right hand.—Of what color is the dog? White, with dark spots.—Name parts of the dog's body shown in the picture. Head, nose, eyes, ears, legs, tail, etc.—Which is the larger, the dog or the pup? The dog.—Which is the taller, the boy or the man? The man.

In this first Chart the word-method is assumed as the easiest and most natural for initiatory instruction in reading. Phonic and literal analysis should not precede, but follow, the teaching of words at sight by their forms. Eleven words are introduced, two of them being single letters of the alphabet.

Point to the word, pronounce it clearly, and recur to it at intervals till the child learns it by sight. Point to the picture when there is a word that can be illustrated by it. Explain the difference between capitals and corresponding small letters. In a dog, a man, let the two words be sounded as a word of two syllables (like a-long, a-go), with the accent on the last syllable. In the dog, the boy, etc., let the be sounded easily, like thi in this.

Should the child show curiosity about the punctuation-marks, tell it that the *period* or *full stop* shows that the sentence is ended, and that the *question-mark* shows that a question is asked.

Chart Number Two.

Object Questions.—In this picture there are parts of three figures: for what are they meant? A dog, a girl, a boy.—How much of each can you see? The head and neck of the dog, parts of the arms and the head of the girl, a part of the head of the boy.—What has the girl on her head? A hat: I think it is meant for a straw hat.—What has the dog about his neck? A collar with a ring in it.—What sort of a dog do you think it is? It looks like a spaniel.—Is the picture meant to show summer-time, or winter-time? Summer-time; because there are leaves on the bushes.

Nine new words are here introduced, increasing the learner's stock to twenty. No phonic or literal order is as yet observed. The child is taught to read naturally, by sight, just as it has been taught to speak naturally, by hearing. The study of the alphabet may be put off till there has been more practice in reading, or it may be taken up at any time, at the teacher's discretion.

Phonic explanations are not needed yet: the child accepts the fact that a certain form of letters stands for boy or girl, and does not require a reason for it at this stage. Begin to form independent sentences here by the use of the pointer; as, "I see a girl," "You can see a face," etc. Skip about, so that the child will not be guided by recollection of the routine order of the words. Let pupils point to any word called for by the teacher or by some member of the class.

Chart Number Three.

Object Questions.—Here is a picture of an ox: on what does the ox feed? Mostly on grass and hay.—Is the hoof of the ox like the hoof of a horse? No: the hoof of the ox is split in the middle; the hoof of the horse has no split.—The flesh of the ox is called what? Beef.—Are the horns of the ox hollow or solid? They are hollow, and the ox does not shed them. The deer's horns are solid, and he sheds them.—For what may horns be used? For making combs, buttons, and other useful things.

The exceptional sound of o in do (doo) and to (too) has no diacritical mark to distinguish it as yet; neither has the **z** sound of **s** in is and has. The child, recognizing chiefly the entire forms of the words, does not trouble himself as yet about particular letters.

Thirty-five new words are here introduced, making fifty-five in all. Do not drill too long on the short words; try the next lesson, and return.

By the use of the *pointer* you may now train pupils to make short sentences for themselves; as, "We met an ox," "I see an ox," "We saw a cat and a fox," "She is by the ox," "The ox is by the hay," etc. As the words of two letters are mostly pronouns or prepositions, they can be learnt better in sentences than singly. Call on the class to suggest words to be printed on the blackboard. Do not be deterred should such words as breakfast, sugar, etc. be proposed. If they are familiar in meaning, the child will soon learn their forms.

Chart Number Four.

Object Questions.—Look closely at the picture, and say what you see in it. The chief object is a picture of a hog; in the background we have a view of a barn, a man and a boy near the door of the barn, and a small horse, or nag, not far from them; while between the barn and the hog there are four pigs.—What do we call the flesh of the hog? Pork.—Are the bristles on a hog's back of any use? Yes, they are of use in making brushes.

Give the a in past a sound not so broad as that of a in father, nor so short as that of a in fat.

We have now had words giving the short sounds of a, e, i, o, and u; short sounds modified by r, as in girl and or; the long sound of e, as in me, and of o, as in go; the diphthongal sound of oi, oy, as in voice and boy; i long, as in ice, or y final, as in my; short oo, as in book (= u in put); long oo, as in moon (= o in do, move); y consonant, as in you (= yoo); the sounds of b, c hard (like k), d, f vocal (as in of), f aspirate (as in if), g hard (as in go), m, n, p, r, s, t, v, w, x, z (= s in is, has), sh (as in she), and th vocal (as in this).

The mark = means equivalent to.

Pay special attention to the inflections of the voice. In the question, "Can the fat hog run?" the concluding word must take the rising inflection, or the tone of inquiry and suspense.

Chart Number Five.

Object Questions.—What does the kitten in the picture seem to be doing? Looking at a page of a book.—Does the book seem to be large or small? It seems meant for a large book.—Against what does it rest? Against another large book.—On what does the kitten seem to be sitting? On a sheet of paper.—May we call a kitten a kit? Yes, just as we may call a puppy a pup.—What is the difference between a page and a leaf of a book? A page has only one surface, a leaf has two surfaces.—What is a surface? The outside part of anything that has length and breadth.—Which is the length and which the breadth of this page?

Words familiar and easily pronounced are easily learnt by sight without regard to their consonant combinations or silent letters. Attention is not yet called to the silent letters in leaf, read, page, or to the consonants in try, catch, from, girls, etc. Synthesis, not analysis, is in order now. Heed the rising inflection in the interrogative sentence. Give the pure sound of short a in catch; of short oo in look and book.

Insist upon expressive reading. Repeat the sentence in a clear, easy, colloquial manner, with proper animation, and call on the child to do the same. Cultivate a distinct utterance. In teaching words by their forms, skip from word to word, so that the mere recollection of a sentence may not serve the child as a guide to the word itself. Pronounce the phrases at the head of the page as if they were words of two syllables, with the accent on the last syllable.

Chart Number Six.

Object Questions.—What does the woman in the picture seem to be doing? She seems to be leading a little boy over the stones in a brook.—Describe the boy. His legs are bare a little above the knees; he has no shoes on his feet; his right arm is raised, and the fingers of his right hand are spread; the woman holds him by the wrist of his left arm.—And now what of the woman? Her head is bent; she wears a long gown; the forefinger of her left hand is raised, as if she were telling the boy to take eare; she has on shoes, but has no hat on her head.—Does it seem to be warm weather? It does; because both the boy and the woman are thinly clad.

A child will learn by the form, irrespective of the length, to read a word—the use, meaning, and pronunciation of which are familiar to him—quite as readily as he will learn to read words of two or three letters. Such words as mother, father, etc. are indeed easier to him than the abstract words if, as, how, etc.

In this lesson occur the vocal sound of th, as in this; ch (=tsh) in teacher; short oo in brook; Italian a in father; broad a, as in water; o like short u, as in brother, mother; s like z, as in has, etc.; ss (=s) in cross. Let the child discriminate between words of one syllable and words of two syllables.

The r in mother, father, letter, water, etc. has its pure, untrilled sound; the first r in brother, like the r in cross and brook, has a slightly trilled sound.

Chart Number Seven.

Object Questions.—What is the little bird doing? Sitting in her nest.—Why does she sit there? To keep her eggs warm, I think, so that out of them may come little live birds.—Of what are birds' nests usually made? Of straw, dry grass, little sticks, and bits of yarn, when the bird can find them.—What is the form of the nest? It is something like a cup or small bowl.—Where is it placed? Sometimes on a bush, sometimes in the notch of a tree.—Point to the bill of the bird; to the side-wings; to the tail-feathers.—Ought we to protect the birds? As most of them do more good than harm, we ought to protect them and their nests.

In this Chart we commence the analysis of the elementary sounds. Let the child pronounce the word pan, and then distinguish the three elementary sounds of which it is made up. In pan and nap the consonant sounds are transposed, and it will be easy to show how the terminating sound of the one word may be fused into the initial sound of the other.

Do not attempt the difficult task of bringing out each separate consonant sound with perfect accuracy, for to do this a vowel-sound is needed. It will be enough, at this stage, if the child is made to understand that certain vocal sounds are the elements of spoken words, and that the purpose of written or printed letters is merely to represent these sounds to the sight. Explain the meaning of the words pan and nap by such easy illustrations as, "A pan of milk;" "Wake the boy from his nap;" "The nap of the cloth is worn off," etc.

Chart Number Eight.

Object Questions.—What does the picture represent? A man, a boy, a horse.—What do they seem to be doing? The horse seems to be at a full gallop; the man and the boy are on the back of the horse.—How is the man dressed? He has on a light coat, white-topped boots outside of his trousers, and a low-crowned hat; I think there is a spur on the boot of the right leg.—What of the boy? He has on a jacket and trousers, and a cap on his head.—Is the hoof of the horse like that of the ox? No: the hoof of the ox is split in the middle; the hoof of the horse has no cleft in front.—Point out the hoof, mane, neck, etc. of the horse.

Exercises in phonic analysis are here continued. The words pin-nip, mug-gum, and dash-shad offer good and easy examples of nine of the elementary sounds. Be in no haste to have the child imitate your pronunciation of the separated sounds, for the first steps should be simply to train the ear to distinguish them. Pronounce the elements slowly, and call upon the class to say what word they form. After pin, mug, dash, nip, gum, shad, see if they will recognize the elementary sounds of fin, jug, lash, lip, hum, lad—words rhyming in order with the preceding.

The pupil should be required to distinguish the *object* (a cap, for instance), the picture of it, and the word cap, each from the other. The distinction is, of course, a very simple matter, but it may be well to make certain that the child has clear ideas on the subject.

Chart Number Nine.

Object Questions.—What does the boy in the picture seem to be doing? He has his right foot on the lower bar of a three-barred fence, and seems to be preparing to climb over it.—What is there before him? A part of a rainbow in the sky.—How is he clad? He has on a short frock.—What is that about his waist? A belt; and a strap goes crosswise over his left shoulder.—In which direction is he looking? Over his left shoulder.

Diacritical marks are introduced in the first two lines, and silent letters are designated in rain and bow. Call upon the pupil to point out the silent letters in coat, head, fence, nose, and fine. In eyes we have an irregular sound; eye having the sound of long i. In the interrogative sentence ("Will he get over the fence?") heed the rising inflection. In shoc, oo has the force of long oo in moon. Double 1 in will has the sound of single 1, and double e in seen, that of single e in me. The s in eyes and nose has its z sound, but in lips it has its hissing or aspirate sound.

The Phonic Method consists chiefly in first teaching the children the *sounds* of letters instead of the alphabetic names of letters. In pronouncing the word *lud*, for instance, the pupil should be taught to give (as nearly as he can) the independent sound of 1, then the short sound of a, then the sound of d, and to pronounce the combination *lad*. In *glad* the additional element of g hard should be practiced.

Chart Number Ten.

Object Questions.—What does this picture represent? A lion and a fox.—What do we call the hair over the neck and shoulders of the lion? His mane.—The lion and the fox have each four legs: what do we call an animal with four legs? A quadruped.—How do the lion's feet differ from those of the horse? The lion has claws like a cat; animals that feed on grain or grass do not have claws.

Illustrate on the blackboard the force of silent e in lengthening the vowel in mane, cube, fine, note, etc., contrasting these words with man, cub, fin, not, etc.

Point out the silent letters as marked in mane, read, teeth, mine, etc. Call attention to the diacritical marks over the vowels a, e, i, o, u, and over the consonants hard g and hard c. Explain that these last two marks are to distinguish the sound of g in go, etc., from that of g in gem, etc.; and the sound of c in ean, etc. from that of c in eity, etc.

In first give i the sound it has in third, sir, etc. Pronounce the ai in again like short e in men.

Explain the word *cube* by some solid body with six equal square sides; *globe*, by some round body; *mine*, by "This book of mine;" *mane*, by pointing to the lion's mane.

Nearly half the Elementary Sounds have been now introduced, but in no fixed order. The child has proceeded by natural steps, as in learning to speak.

Chart Number Eleven.

Object Questions.—How many masts has a ship? Three—the main-mast, the fore-mast, and the mizzen-mast.—Point them out in the picture. The main-mast is the middle one; the mizzen-mast is the hindmost, or the one nearest the stern; the fore-mast is the forward one, or the one nearest the bow.—What is the stem of a ship? It is the wedge-like part forward, from which the bowsprit (pronounced bo'sprit) runs ont. The bow (pronounced bou) forms the stem.—What is the stern? The after part of the ship.—What sort of a ship is that in the picture? An ocean steamship.—Does the ship use both wind-power and steam-power? Yes; the sails are set, and the smoke shows that steam-power is used.

Call attention to the marks over long e in steam, short i in ship, long a in sails, and long o in boat; also to the silent letters in steam, sails, and boat; and to the mark under s (having the sound of z) in sails; noting the difference in the sound of the first s and that of the last s in this word.

In the reading lesson ("On the sea we see a big ship") tell the children to note the difference in the spelling of the two words, though they are pronounced alike. The consonant combination st ends the word mast and begins the words stern and steam: a little practice may here be given to it; also to sts in masts. In rope and side point out the unsounded e. Explain that the elementary consonant sound sh requires two letters to express it, though most of the elementary sounds require but one.

Chart Number Twelve.

Object Questions.—You can tell which is the larger, the sheep or the lamb; but can you tell which would yield the more wool? The sheep.—What is the wool good for? For cloth of many kinds, blankets, carpets, and stockings.—Can you show me anything made of wool? This coat is made of wool, or partly of wool.—What do they sometimes mix with wool? Cotton.—How do we get cotton? From a plant that grows at the South.—Can you show me anything made of cotton? Yes; my shirt is made of cotton.

Point out the diacritical marks attached to long e, short a, short i, short oo, u as in pull (having the sound of short oo), and n in think. Show that the vowel-sound in wool and that in pull are just alike. The element ng requires two letters to express it; but n is sometimes its equivalent, as in ink, think, which are pronounced as if spelt ingk, thingk. Show that the y in play, the a in teach, the b in lamb, the e in graze, make, side, little, and one e in keep and sheep, are unsounded. The ch in child and teach has the sound of tsh (as if the words were spelt tshild, teatsh). Practice on the sound, thus: tea-ch . . . ch-ild; t-ea-ch . . . ch-i-l-d. Another element requiring two letters to express it is th; in cloth, th is aspirate or sharp; in clothe, th is vocal or flat. Which is vocal and which aspirate in this, thin; that, thank; breath, breathe? The blackboard should be used in these illustrations.

Chart Number Thirteen.

Object Questions.—Describe the boy in this picture. He is making a bow to a little girl; in his right hand he holds his hat, and with his left hand he offers a flower; his right leg is in advance of his left; he bows with grace.—Can you see a ribbon? Yes, on the boy's hat.—Describe the girl. She stands up straight, and puts out her left hand as if to receive the flower; with her right arm she presses her doll against her side.

Explain the diphthongal or double vowel sound of ou (=ow) as it occurs in house, cows, flower, and bow (to bend). Avoid the habit, common in some parts of the country, of giving an impure quality to the sound (as if cow were spelt ke-ow). In young, ou is not a diphthong, for the o is unsounded. In thank the n has the sound of ng; heed the diacritical mark given to n to specify this sound.

Tell the pupils to point out all the words of two syllables in the Lesson (flow-er, la-dy, la-zy, sis-ter, of-fers); also all the words in which a letter is unsounded (plays, house, young, doll, smell, makes); also the words in which s has the sound of z (plays, cows, says, his, is, offers). In says (= sez) the ay has the irregular sound of short e. Should the pupil ask why in bow (to bend the body) ow has the diphthongal sound instead of that of long o as in bow (for shooting arrows), the only answer is that he must judge by the sense what word is meant.

Chart Number Fourteen.

Object Questions.—Here is a picture of a boy: what does he seem to be doing? Driving hoop.—Describe him. He has in his right hand a stick, and seems to be running pretty fast.—Where does he seem to be driving hoop? In a pleasant road, skirted on one side by a fence, behind which are trees.—How is the boy dressed? He has a cap on his head, and shoes on his feet; he wears a blouse or frock and trousers; his shirt-collar is turned down and tied with a neck-handkerchief.

In this Lesson we have three new diacritical marks: the a in large, also the soft g; and the o in come, where o has the sound of short u. Point out the unsounded letters in large, have, give, drive, come, quick, James, class, love, glove, gone, head. Ask the pupil what mark may be put over the o in love and glove, if we wish to show how it ought to be sounded.

The sound of o in gone is not so broad as that of a in ball, nor quite so short as that of o in on. Point out the difference in the diacritical marks of g in large and in give. Use the blackboard in explaining. Call attention to the difference in the sound of ch in school from that of ch in child and teach. In nearly all cases where ch has the sound of k the word is from the Greek. In quick, qu has the force of kw. Ask if oo in school and hoop has the same sound that it has in wool and book. (It is long in school, hoop; short in wool, book.)

Chart Number Fifteen.

This Chart is for drilling in the Vowel-Sounds, Simple and Compound. In the first column are given the Representative Letters, with their diacritical marks. All have marks except ou and oi and their Equivalents ow and oy. Where a Representative Letter has an Equivalent (as to sound), the equivalent is placed in the same line with it: thus, e in they is the equivalent of a in fate; and a in was is the equivalent of o in on. Silent letters are indicated by a change in type not sufficiently marked to disfigure the page. These silent letters should be carefully pointed out.

In a class drill let the teacher first enunciate the Elementary Sound; let the class repeat it, and then, singly or collectively, pronounce the words given as containing examples of the sound. When the pupil comes to this mark, =, explain to him that it means equivalent to.

In the Compound Vowels let the pure sound be required; do not let ou (as in county) degenerate into e-ow, or oi (as in oil) into the sound of long i. In the word machine, where i has the sound of long e, the ch has the sound of sh, as is generally the case where the word comes to us through the French; as in chaise, chivalry, etc.

(The teacher should adapt the length of the lesson on this Chart to the capacity of the class, giving a little at a time, until the whole of it is mastered.)

Chart Number Sixteen.

Exercises in the Elementary Consonant Sounds are here given. The diacritical marks are limited in number, being confined to c in *city*, ch in *chaise*, g in *gem*, g in *get*, n in *ink*, s with the sound of z, as in *has*, th in *this*, and x in *exist*.

Explain that w and y are consonants when heard before a vowel in the same syllable; also, that in wh the w is silent in who, whole, whoop, and their derivatives; also, that when x begins a word (as in Xerxes), it has the sound of z.

In basin, every, given, heaven, etc., do not sound the vowel in the last syllable; observe the same caution in evil, weevil. But in level, civil, Latin, satin, and some other words similar in termination, the vowel of the last syllable is sounded.

In this Chart it will be seen that where a Vocal has a corresponding Aspirate, the two are placed on the same horizontal line, though in separate columns, divided by the perpendicular black line running through the middle of the page. Thus, b is placed on the same line with p; th as in this, on the same line with th as in thick. By Vocals we mean voice-sounds; by Aspirates we mean sounds in which the breath is more decidedly emitted with the voice.

See that the silent letters (as in half, debt, evil, etc.) are duly heeded; they are marked by a much lighter form of type.

(The remark under Chart No. 15 as to length of lesson applies also to this Chart.)

Chart Number Seventeen.

Object Questions.—What have we here? A picture of a stag.

—What is a stag? A male deer.—Does not the female deer have horns? Never, except in the case of the reindeer. The female deer in the background of the picture has no horns.—How often does the stag shed his horns? Once a year.—Can he run fast? Yes, very fast; his tegs are long and slender, his body light, and his coat clean and shining.—What do we call the flesh of the deer? Venison.—What do we call a young deer? A fawn.—Which of you has ever seen a live deer?

Point out the unsounded letters in know, zone, move; also in deer, size, male. What does the diacritical mark under the u in truth denote? It denotes that the u has the sound of long oo, as in moon (like o in move). Long u after r in the same syllable requires this sound. In wood we have the sound of short oo; which compare with the sound of long oo in mood.

Let the child now try to imitate printed words on his slate. In oral spelling, where words of more than one syllable are given out, let him pronounce each letter, making a pause between syllables, and, at the end, pronouncing the whole word, thus: Dilatory—d-i-l—a—t-o—r-y, dilatory. Do not have him say d-i-l, dil—a—dila, etc., according to the old fashion of teaching. Call on the pupils to suggest words in which a given elementary sound occurs.

Chart Number Eighteen.

Object Questions.—What do you see in the picture? A woman, a baby, a cat, a cup and spoon, a loaf of bread, some twigs of bushes with leaves on them, some small birds in the air.—What is the baby doing? He is pointing to the flying birds.—With which hand is he pointing? His right hand.—What has the woman on her head? A scarf.

Here is a lesson for animated and expressive reading. All the words, except baby, are of one syllable. The exclamation, "O, what a fine, fair day!" should be so rendered as to express enjoyment; and the baby's cry, "Stay, stay!" should not be uttered tamely. Do not permit a monotonous delivery.

Point out the unsounded letters in day, toe, nail; also in fine, fair, here, cried, gave, some, blue, flies, etc.

Chart Number Nineteen.

Object Questions.—What does the boy seem to be doing? Studying his lesson.—Where is his book? Behind him, in his right hand.
—What is he doing with his left hand? He is resting it on the scat of a chair.

The selected words for phonic spelling should be carefully studied, and the unsounded letters pointed out. The unsounded letters in the reading-lesson should also be noted.

Chart Number Twenty.

Object Questions.—What does the picture represent? Two women and a baby.—What are they doing with the baby? One woman is holding the baby on the back of the other woman, who bends over so as to make a good seat for it.—Where do they seem to be? Out of doors, at the foot of steps leading to a marble pavement.

The lesson is in verse. Explain the meaning of *rhyme*. Call attention to the unsounded letters in *little*, *rattle*, etc. Insist upon an animated mode of delivery, and on the right inflections where a question is asked. This is a good lesson for a drill in simultaneous reading by a class.

Chart Number Twenty-one.

Object Questions.—Describe the figures. A girl and a goat.—What is the girl carrying? A bundle of grass.—What does she hold in her right hand? A sickle for cutting grass.—Point out the eaves of the little cottage, a part of which is shown in the picture. (Eaves are the edges or lower borders of a roof.)

Let the selected words be spelled by the phonic method. Point out the unsounded letters in the reading-lesson, and show the difference in the sound of o in *shoes* and in *does*.

Chart Number Twenty-two.

Object Questions.—Where is the kitten taking her nap? In a slipper.—What does the color of the kitten seem to be? Gray and white.—Is it a young kitten? I think it must be young, or else the slipper must be very large.—Why so? Because a large kitten could not find room for itself in a slipper of the common size.

In voice give to oi its true diphthongal sound. In the reading-lesson let the pupil point out the unsounded letters in looked, stairs, called, etc.

Chart Number Twenty-three.

Object Questions.—Is the bird in the cage? It is at the open door of the cage.—What are there under the cage? Flowers of various kinds.—Is the cage made of wire? It looks as if it were made all of wood.—Does the door of the cage appear as if it slid up and down, or opened at the side? It looks as if it slid up and down.

Observe that the second vowel letter in *open* is unsounded. The proper sounds of the elements can be well brought out in phonic practice. Give the right inflection to the sentences ending with an interrogation-mark. In *hawk* and *want* the a has the same sound.

Chart Number Twenty-four.

Object Questions.—What does the marmot seem to have in its fore paws? A nut.—Where does it seem to be resting? On the bough of a tree.—What season of the year is it? Spring or summer.—Why so? Because there are leaves on the tree.

There are three words of two syllables each in this lesson: mar'mot, win'ter, be-gins'. Let the pupil tell whether the accent is on the first syllable or on the last in each word. In the last four lines see that the proper pauses are given at the semicolon and the comma.

Chart Number Twenty-five.

Object Questions.—Here is a picture of a log hut: why is it so called? Because it is made chiefly of logs.—What do you see under the porch by the door? A girl sitting.—What is in front of her? A dog sitting on the ground.—What is that thing, like the letter O, which is hanging from the side of the hut at the girl's left? A horse-collar.—What trees are represented back of the hut? Fir trees.

The sound of ew after r in *drew*, and of ough after r in *through*, is the equivalent of long oo. Give the pure diphthongal sound to the ow in *down*. (See remarks on the reading-lesson of Chart Thirteen.)

Chart Number Twenty-six.

Object Questions.—What does the boy here seem to have on his shoulders? A hoe and a rake.—Which has he on his right shoulder? The hoe.—Does he seem to be in the house or out of doors? In the house.

The e in garden is not sounded. The attic is the room at the top of the house. The lesson is in rhymed verse. Give to the e in the a slight and easy sound.

Chart Number Twenty-seven.

Object Questions.—In what does the peacock differ from the female bird? In the rich plumage of its tail.—Where does the peacock seem to be standing? On a stone cornice resting on columns.—How many birds do you see? Two male birds and one female.

Call on the pupil to point out the unsounded letters in the selected words, and to tell the number of syllables in *vi'o-let*. In *golden* the e is not sounded.

Chart Number Twenty-eight.

This Chart is devoted to a single lesson, one selected for reverent and emotional delivery. It should be reserved until the pupil can enter fully into the spirit of it.

Chart Number Twenty-nine.

COLOR.

Color as shown by the *solar spectrum*, and color as seen in *pigments*, are different things, and while their respective mixtures sometimes lead to identical results, they frequently lead to totally different ones; hence the confusion of ideas in regard to the classification of colors.

We know by experiment that a yellow and a blue liquid or a yellow and a green powder when mixed together will produce respectively a green liquid and a green powder. When the yellow and blue rays of the *spectrum* are mixed together, *white* light is produced. The same effect would be produced if the eye were to receive the reflected image of two discs, one yellow, one blue; but a disc painted with these two pigments mixed would appear green.

In the ordinary work of life we are concerned more with colored materials than with colored rays; therefore we adhere to the old theory, which forms an easy means of studying the mixed colors which pigments afford.

The materials needed for color-lessons are cards of various colors, bits of stained glass, pieces of worsted, etc.

LESSON.

The teacher is supposed to have several cards of each color and shade in a box. Selecting one—for example, a blue one—the box is passed to a child, and he is told to select one just

like it and place it beside the other. (Teacher to class.)—Has James selected the right card? No, it is too light. (Another pupil corrects it.) Do you see anything else in this room which is blue like these cards? Mary's dress looks nearly like them, but not quite. You are right: Mary's dress is blue, but it is a lighter shade than the blue on these cards. Mary may come to the box and select a card of the shade nearest that of her dress, and John may come to the box and find another card like it. What things can you think of that are blue? Notice and try to remember all the blue things you see before next lesson.

In this way drill the children on each color and its shades. When you have taught the combination of the colors so as to produce secondary and tertiary, have the children arrange the cards with the secondary colors between the appropriate cards of the primary colors, etc., in the manner suggested by the diagrams on the chart.

Chart Number Thirty.

ALPHABET IN SCRIPT LETTERS.

Cover, Page 2.

THE ALPHABET IN ROMAN LETTERS, WITH ANALYSIS OF FORMS OF LETTERS.

Cover, Page 3.

FORM.

For teaching form the teacher should prepare a set of models in card or pasteboard, about six inches in diameter. Exhibit them singly, and have their names repeated by the children. Each figure for illustration should also be neatly and accurately drawn on the blackboard. If the teacher is unable to do this by hand, a ruler and compass can be obtained. As far as practicable, the teacher should prepare his own models or appliances in the presence of the children, as the sight is instructive and will stimulate them to imitation, and hence to invention.

Be satisfied to advance by slow degrees. One idea is enough for one lesson. Give the child the correct name of the thing you are considering. Encourage the children to provide their own material. A piece of lath made smooth with sand-paper and marked off in inches from the teacher's yardstick will be more valued and more frequently used than the finest rule that could be provided.

We give the following suggestions as an advantageous method of developing ideas of form.

Length.—Give a clear conception of distance in one direction. Draw a line, and explain that it has length only. Measure the objects in the room with a string or a rule. Explain that when we speak of the distance from their homes to

the school, or from one place to any other, we mean the length only, and not the width.

Length and Breadth.—One child may be asked to walk along the room, another across it. Explain that the largest measure of the floor is length, the shortest breadth. Have the children measure various objects, as their slates, hand-kerchiefs, etc.

Length, Breadth, and Thickness.—Solid bodies have three dimensions: the largest is length; the next, breadth; the smallest, thickness. Have the children point out solid objects, and conjecture their length; etc., always verifying, if possible, by actual measurement.

After you have fully developed the *facts*, have the children repeat:

A line has length only.

A surface has length and breadth.

A solid has length, breadth, and thickness.

LINES.

Teach the difference between straight, broken (crooked), curved, waved, and spiral lines. Illustrate on the board, and point out the lines in the sides or edges of objects about the room. Require the children to name the lines which bound things they can remember.

The *direction* of lines should follow, as horizontal, perpendicular, oblique, parallel, converging, and diverging. The

children should be furnished with thinly-shaven splints or sticks, and be required to place them in the directions named.

ANGLES.

When lines meet or cross each other they form angles or corners. Have the children form the different kinds of angles with their sticks or draw them on their slates. Then let them point out the angles formed by the edges of the different objects in the room.

PLANE FIGURES.

Draw a triangle on the board; have the children imitate it with their sticks. Explain that three lines are the smallest number that can enclose a space: two straight walls would not make a house or a room.

Let each lesson be a review of the preceding. Tell in what direction the lines lie that form the triangle. How many angles in a triangle?

To form a square, distribute sticks of equal length, and direct the children to place two of them parallel to the edge of the desk, with a space between them equal to the length of the sticks, then put in the other two sides. Dwell upon the fact that there are four equal sides and four equal angles in a square.

The relation of the square to the rhombus, and of the rectangle to the rhomboid, should then be shown.

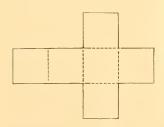
CIRCULAR FIGURES.

Exhibit a number of round objects. Construct a circle on the board by means of a compass or a string. Place a dot to mark the centre; show that all parts of the circumference are equally distant from it. Explain that a straight line passing from one edge to another, and through the centre, is a diameter; and that one-half of this line, extending from the centre to the edge, is a radius. Dwell upon the fact that the bounding line is the circumference, and the space so bounded the circle. Ask for the names of other round objects.

Show the ellipse and oval in card-board and other objects.

SOLIDS.

The teacher may construct the rectangular solids in the presence of the pupils by drawing mathematical figures on card-



board, cutting the lines halfway through, and bending the card into the required shape. The annexed diagram gives the marking necessary to form a cube; the dotted lines show where to fold.

The names of the other solid forms should be learned one by one, and the children required to

name other shapes like them. They should count the edges, sides, and angles, etc., as learned in previous lessons.

OBJECT LESSON.

The teacher places the box of solids before the pupils, and asks one to select the *sphere*. What is the shape of this piece of wood? It is round. Is it round like a dollar or a cart-wheel? No; it is round like a ball. That is true: sphere means "round like a ball." What kind of a line bounds all things that are round? A curved line. Will the line that bounds this sphere be anything like the circumference of a circle? Yes; just like it. What kind of surface has a sphere? It has a curved surface. Right; and, like the circumference of a circle, that surface is everywhere the same—that is, equally distant from the centre. Repeat: "A sphere has a curved surface everywhere the same." Can the sphere have a diameter? Yes. What kind of a line would it be? A straight line passing through the centre of the sphere.

What is the shape of the line which passes up and down the stove-pipe? Around it? Name some other things which are bounded by curved lines only. Name some which are bounded by curved lines and by straight lines.

Roll up this slip of card, and then let it uncoil in your open hand. What is the shape of the line that forms its edge? Spiral. I will show you another kind of spiral line, made with a piece of wire by winding it around my pencil and then removing the pencil. What other things have you seen that are spiral like this line? A cork-screw; the tendrils of some plants.

Look at the edges of the door of this room; are they straight, curved, or crooked? Straight. In what direction are those which extend from the floor toward the ceiling? Those which extend across the top or the bottom?

Which of these solid blocks has edges like the door? (Child selects the cube.) Yes; the cube is one of them. How many edges has the cube? How many faces or sides? What shape are the sides? All squares. Are all the sides alike? They are. Repeat: "The cube has six flat square sides, all equal." How many plane angles can you count on the cube? Twenty-four,—four on each side. How many corners has the cube? Eight. Yes; and you will notice that three sides or faces meet to form these corners. Now repeat the parts of a cube. "Six square sides, eight solid angles, twelve edges."

SUMMARY OF CONTENTS.

Nos. 1 to 6 are for sight-reading of words, phrases, and sentences.

Nos. 7 and 8 show words as made up of elementary sounds, with reading by sight,

Nos. 9 to 14 are reading-lessons with exercises in Phonic and Alphabetic Spelling.

No. 15 gives phonic exercises on Vowel Sounds.

No. 16 gives phonic exercises on Consonant Sounds.

In Nos. 15 and 16 the *drill letters* are *diacritically marked*, and *numerous examples* are given for practice.

In No. 16 the consonants are arranged (in two columns) so that pairs are on the same line. So far as possible, among the examples under each drill letter, words are given in which that letter is duplicated; thus, bulb, noon, ginger, thither, gig, prop, church, etc.; also words embracing each pair; thus, cargo, dent, charge, favor, size, etc.

Nos. 17 to 27 are reading-lessons with exercises in Phonic and Alphabetic Spelling.

No. 28 furnishes a lesson for elocutionary drill. While the words are so short and easy as to be read by very young pupils, the phraseology gives scope for the display of the highest elocutionary powers,

No. 29 is a chart of colors, with a reading-lesson thereon. Nine colors are represented—Red, Blue, Yellow, Orange, Violet, Green, Citrine, Olive, and Russet. This chart will be found very useful in teaching the pupils to distinguish colors.

No. 30 is the Alphabet in Script letters.

Cover page 2 is the Alphabet in Roman letters, with an Analysis of the forms of letters.

Cover page 3 is a chart representing-

Lines.—Vertical, horizontal, oblique, parallel, intersected, curved (right and left), waved, spiral.

Angles .- Right, acute, obtuse.

Surfaces.—Triangle, square, rectangle, rhombus, rhomboid, convex, circle, half circle, quarter circle, ellipse, oval, concave.

Solids.—Cube, sphere, cylinder, cone, triangular prism, pyramid, wedge.

Forms.—Crosses, stars, rosettes.

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